

REMARKS

Claims 1-20 are presently pending in the present patent application. New claim 20 has been added as independent method claim. No other amendments to the claims are presented in this Reply.

In the Office Action, claims 1-19 were rejected under 35 U.S.C. 102(e) as being anticipated by prior art described in the specification of the present application ("the described prior art"). However, the described prior art does not disclose or suggest all of the features of claims 1-19. For example, claim 1, which is directed to a method for minimizing slip line faults on a surface of a semiconductor, comprises, among other steps, a "a further heating" step, which is not disclosed or suggested by the described prior art.

The "further heating" step of claim 1 is directed to a heating portion of an RTA process that is to occur after the wafer is initially heated to a first temperature and heating is paused. After pausing step, in the described prior art RTA process, the wafer is heated again at a heating rate that is rectilinear. Thus, in the described prior art, the heating rate in this latter phase is at a constant rate. However, in the "further heating" step of claim 1, the wafer is heated during this latter phase in a different way than in the described prior art. Specifically, as is set forth in claim 1 the heating in this latter phase is implemented to include two portions such that the heating rate for its initial and final portions are different, and in particular, the heating rate for the final portion is relatively higher than the first portion. Thus, providing a slow-to-high change in the heating rate during this latter heating phase of the RTA process. Clearly, such a heating steps is not disclosed or suggested by the described prior art, which as explained above, only describes a constant heating rate.

Moreover, this distinction is clearly explained in the specification of the present application. The specification explains that the present invention (such as that described by claim 1) is performed to minimize slip line faults that occur from using the described prior art RTA process in the specification.

In addition, a review of the dependent claims of claim 1 makes the allowability of claim 1 over the described prior art more evident. For example, claim 2 specifically states that "heating during [the phase in question] is not uniform and overall is less than 50° C./sec. Claim 3 states that the heating continuously increases from the low heating rate to the high heating rate. Claim 4 specifies percentages for the duration of the low heating rate and the high heating rate. Clearly, such features cannot be encompassed by the described prior art, which teaches a rectilinear heating rate.


Accordingly, all the features of claim 1 are not disclosed or suggested by the described prior art. Withdrawal of the rejection and allowance are respectfully requested. Claims 2-11, which depend from claim 1, are allowable at least because claim 1 is allowable.

Independent method claims 12, 19, and 20 are also allowable at least for the same reason as given above with respect to claim 1. Claims 13-18, which depend from claim 12, are also allowable at least because claim 12 is allowable.

Reconsideration and withdrawal of the rejections are respectfully requested. Should the Examiner not agree that all pending claims are allowable, then a personal or telephonic interview is respectfully requested to discuss any remaining issues and expedite the eventual allowance of these claims.

Respectfully submitted,

Date: June 21, 2005



Pejman Sharifi (Reg. No. 45,097)
for: Allan A. Fanucci (Reg. No. 30,256)

WINSTON & STRAWN LLP
CUSTOMER NO. 28765

(212) 294-2603